

model is then edited as desired, step 2714. Once editing is complete (e.g., the user opts out of edit-mode, or a requisite period of time elapses), the graphics for the model are selectively updated, step 2716. The selective update relieves the various devices from recalculating and displaying all updates and changes. Instead, only those updates that affect what the user experiences are updated. Finally, the first graphics object of the first surface feature is removed from the application scenegraph, step 2718.

REMARKS

Claims 1-63 are pending in the application. Claims 1-63 stand rejected. The Specification has been amended in this Response. Claims 1, 38 and 51 have been amended in this Response. Claims 64, 65 and 66 have been added. No new matter has been added. Applicants respectfully request reconsideration of the pending and new claims in light of these amendments and the following remarks.

I. Drawings

Applicants note that there item 10 of the Office Action Summary has not been completed. If there are any objections to the drawings submitted with the application, Applicants respectfully request notice thereof.

II. The §112 Rejections

Claims 1-63 stand rejected under 35 U.S.C. § 112 as being unpatentable under 35 USC § 112 for various reasons. The specification and claims have been amended to address these issues as described below.

A. Loading of data on page 69 of the Specification and FIG. 27

The Examiner points out in paragraph 2 of the Office Action that lines 1-3 of page 69 describe "loading data about the first surface feature from a database that is stored on the data

storage system" but does not state what the data is loaded onto. Paragraph [0171] has been amended to state " The method continues in step 2704 by loading data about the first surface feature from a database that is stored in the data storage system into memory (random access memory or system memory) of a computer system." No new matter has been added. Support for this amendment can be found in claim 38 as filed and on page 6 of the Specification as filed, paragraph 16. Applicants respectfully submit that with this amendment, the rejection is traversed. (The word "continues" was substituted for "begins" with reference to step 2704, as "The method begins" had been used to describe step 2702.)

B. Omission of Essential Elements

The Examiner has pointed out in paragraph 4 of the Office Action that claim 1 recites in part "loading data of the first surface feature from a database stored in the data storage system," but does not describe what the data is loaded into. Claim 1 has been amended to recite in part: " A method for interactively editing a model comprising a first surface, the method being implemented on a computer comprising a processor, a data storage system, at least one input device and at least one output device, the computer further having memory including random access memory, the model being stored on a computer-readable media, the method comprising:

loading data of the first surface feature from a database stored in the data storage system into the memory of the computer; ..."

No new matter has been added. Support for this amendment can be found in claim 38 as filed and on page 6 of the Specification as filed, paragraph 16. Applicants respectfully submit that with this amendment, the rejection is traversed.

C. Antecedent Basis of "Application Screengraph"

The Examiner has stated in paragraph 5 of the Office Action that there is insufficient antecedent basis for the limitation of the "application screengraph" recited in claim 1. Page 35, paragraph [0091] has been rewritten to recite:

For example, the two rectangles with a shared edge illustrated in Figure 5a may be represented by a ~~screen~~ scene graph, as shown in Figure 6. ("Scene graph" is also written herein as one word "scenegraph".) The traversal order in the ~~screen~~ scene graph is top-to-bottom and left-to-right. A group node 190, is the beginning of the traversal. A next node 192 establishes a material property, namely a color (grey40). Node 194 establishes the beginning coordinates of the image and node 196 establishes an "IndexedFaceSet", or index of the vertices of the left-hand rectangle. Node 198 changes the value of the color material property to grey20 and node 200 establishes an "IndexedFaceSet" for the right-hand triangle. When this ~~screen~~ scene graph is traversed, the image shown in Figure 5a is displayed on the screen.

No new matter has been added: the word "screen graph" was a typographical error. (See for example, paragraph [0016] on page 6 of the Specification as filed.) In addition, claim 1 has been amended to recite in part "A method for interactively editing a model ... the method comprising: creating a scenegraph; ...adding the first graphic object to the ~~application~~ scenegraph; creating a geometry object for the aggregate feature; editing the first surface feature in the model; selectively updating the graphics for the model; and removing the first graphics object of the first surface feature from the ~~application~~ scenegraph. Again, no new matter has

been added (see paragraph [0016] of the Specification as filed), but the language has been made to be consistent. Applicants respectfully submit that with these amendments, the rejection is traversed. Applicants further respectfully submit that with these amendments and those discussed in sections A and B herein, claim 1 is now in allowable form.

As claims 2-37 depend, directly or indirectly, on claim 1 and contain all the limitations of claim 1 (as amended), it is respectfully submitted that these claims are now also in allowable form.

D. "The Limitation "Database" in Claims 38 and 51

The Examiner has stated in paragraph 7 of the Office Action that there is insufficient antecedent basis for the limitation of "database" in claim 38 and in claim 51.

Claim 38 has been amended to recite in part: "38. "A computer system for interactively editing a model stored on a database and having a first surface, ... comprising: ... wherein data is processed by the object structure in order to enable a user to edit the model." No new matter has been added. Support for this amendment can be found in claim 38 as filed and on page 6 of the Specification as filed, paragraph 15. As claims 39-50 depend, directly or indirectly, on claim 38 and contain all of its limitations as amended, it is respectfully submitted that claims 39-51 are also now in allowable form.

Claim 51 has been amended to recite in part: " A random access memory, the random access memory having an object structure comprising: ... wherein data is processed by the object structure in order to enable a user to edit a model stored in a database." No new matter has been added. Support for this amendment can be found in claim 38 as filed and on page 6 of the Specification as filed, paragraph 15. As claims 51-63 depend, directly or indirectly, on claim 51

and contain all of its limitations (as amended), it is respectfully submitted that claims 51-63 are also now in allowable form.

Applicants respectfully submit that with these amendments, the rejections of claims 38 and 51 (as well as the rejections of their dependent claims) are traversed.

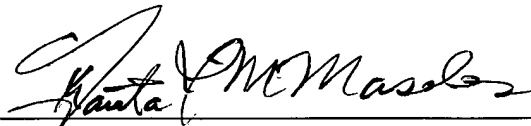
III. New Claims

Claims 64, 65 and 66 have been added. No new matter has been added. Support for claim 64 can be found at claim 1 as filed and on page 6 of the Specification as filed, paragraph 16. Support for claim 65 can be found at claim 1 as filed and on page 6 of the Specification as filed, paragraph 16. Support for claim 66 can be found at claim 1 as filed and on page 6 of the Specification as filed, paragraph 15. Claim 1 being now in allowable form as amended and new claims 64-66 containing all the limitations of claim 1 (as amended), it is respectfully asserted that claims 64-66 are also in allowable form.

CONCLUSION

It is respectfully submitted that this application, as now amended, is in condition for allowance for the reasons stated above. Applicants respectfully request reconsideration of this application and allowance of its pending and new claims.

Respectfully submitted,



Danita J. M. Maseles
Reg. 33,419
Schlumberger Information Solutions
5599 San Felipe, Suite 1700
Houston, Texas 77056
713-513-2515
713-513-2056
Danita@slb.com

Date: April 5, 2005